CASQA's Perspective & Comments on Proposed Bacteria Provisions

State Water Board Meeting

August 7, 2018- Item 5

Overview of CASQA's Comments

- CASQA generally supports State Water Board's efforts to update the Bacteria Provisions
- Changes to Provisions
  - Allow use of Reference Reach / Natural Source Exclusion in areas without TMDL
  - Modify salinity thresholds for applying E. Coli objectives
  - Clarify 303(d) use of beach posting data
- Changes to Resolution
  - Provide direction to form a stakeholder group to evaluate:
    - separate wet weather objectives,
    - fecal coliform and enterococci objectives based on California-specific studies, and
    - alternative indicators as science evolves

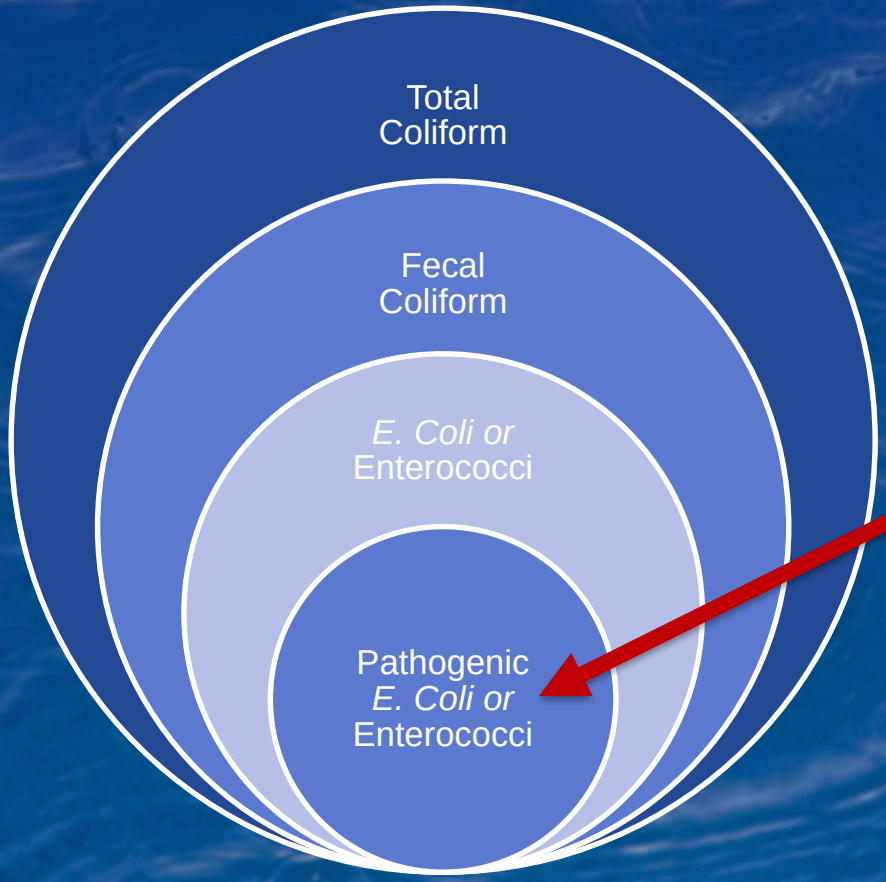
CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION

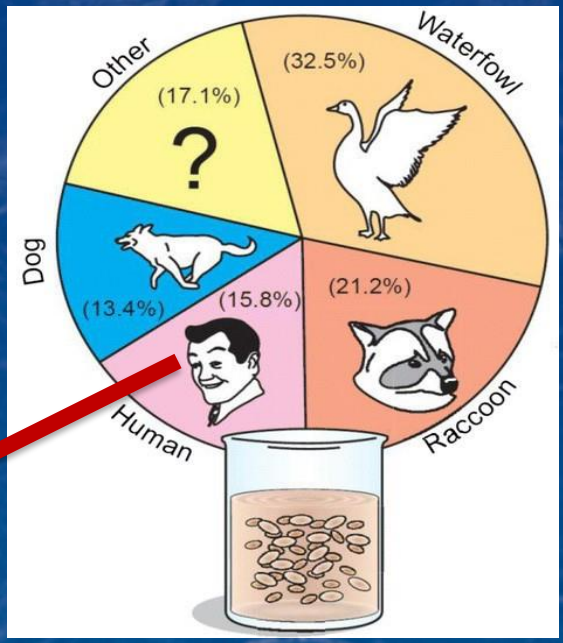
CASQA's Vision

- Sustainable stormwater management
  - Uses runoff as a resource
  - Protects water quality and beneficial uses
  - Efficiently minimizes pollution
- Applied to Bacteria Provisions
  - Focus on solutions that reduce risk to recreators

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION®

Reducing Risk-Objective





(source: Malakoff,[2002]**).**

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4077002/figure/F2/?report=objectonly

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION

Requested Changes to Provisions- Reference Reach

- ISWEBE plan IV.E.1, last sentence and Ocean Plan III.D.1.d, last sentence:
- *In the context of a TMDL or equivalent approved alternative plan, Regional Water Boards may implement a reference system/anti-degradation approach or natural sources exclusion approach in accordance with Chapter IV.E.2.*

Watershed	Allowable Wet Exceedance Percentage	Source
Los Angeles River	22%	1, 2, 3
Malibu Creek	22%	1, 2, 3
San Diego Beaches	22%	3
Pacifica State Beach	22%	3

1. Assessment of Water Quality Concentrations and Loads from Natural Landscapes" (Stein and Yoon, 2007; Technical Report 500),
2. "Fecal Indicator Bacteria (FIB) Levels During Dry Weather from Southern California Reference Streams" (Tiefenthaler et al., 2008; Tech. Report 542)
3. "Microbiological Water Quality at Reference Beaches in Southern California During Wet Weather" (Schiff et al., 2005; Technical Report 448).

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION

Requested Changes to Provisions- Application Enterococci objectives

Change Table 1 ISWEBE:

- Freshwater (*E. coli*): "*All Inland surface waters, regardless of salinity, except Lake Tahoe~~, where the salinity is less than 1 ppth 95 percent or more of the time~~*"

Resolution Finding 12. The Bacteria Water Quality Objectives correspond with the risk protection level of 32 illnesses per 1,000 recreators and use E. coli as the indicator of pathogens in freshwaters and **enterococci as the indicator of pathogens in estuarine waters and ocean waters.**

Table 4. Percent single-sample exceedance of fecal indicator bacteria (FIB) levels in natural streams during dry weather from May 2006-May 2007. Numbers in bold are significantly different (p <0.01).

	Exceedance (%)		
	E. coli	Enterococci	Total coliforms
Season			
Spring 06	0.0	41.7	75.0
Summer	**12.5**	**75.0**	**83.3**
Fall	0.0	0.0	28.6
Winter	0.0	0.0	11.1
Spring 07	0.0	22.2	44.4

Fecal Indicator Bacteria (FIB) Levels During Dry Weather from Southern California Reference Streams. 2008. LL Tiefenthaler, ED Stein, GS Lyon. Technical Report 542. Southern California Coastal Water Research Project. Costa Mesa, CA

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION

Requested Clarification- 303(d) Listing Process

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION

Reducing Risk-Use

https://www.californiabeaches.com/

http://abc7.com/news/3-people-dog-rescued-from-rain-swollen-los-angeles-river/985396/

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION

Requested Changes to Provisions- High Flow Suspensions

- Delete following sentence from ISWEBE plan IV.E.3:
- ~~To adopt a high flow suspension of the REC-1 beneficial use, the WATER BOARD must conduct a **USE ATTAINABILITY ANALYSIS.**~~

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION

Requested Changes to Resolution - Wet Weather Methods of Compliance Analysis

- Proposed New Resolution 3
  - Directs State Water Board staff to develop a stakeholder process to evaluate:
    - Separate wet weather objectives,
    - Fecal coliform and Enterococci objectives based on California-specific studies, and
    - Alternative indicators as science evolves.

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION